

Five-Year Review Report

Second Five-Year Review Report

For

Firestone Tire and Rubber Co. (Albany Plant) (EPA ID #: GAD990855074)

Albany Dougherty County, Georgia

December 2005

Prepared by:

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Date:

12/21/05



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List of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation, and
	Liability Act
CFR	Code of Federal Regulations
COC	Chain of Custody
EPA	Environmental Protection Agency
EPD	Georgia Environmental Protection Division
GCL	Geosynthetic Clay Liner
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
NCP	National Oil and Hazardous Substances Pollution Contingency
	Plan
NPL	National Priorities List
O&M	Operations and Maintenance
OUs	Operable Units
PCB	Polychlorinated Biphenyl
POTW	Publicly Owned Treatment Works
PRP	Potentially Responsible Party
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SVOCs	Semi-Volatile Organic Compounds
TSCA	Toxic Substances Control Act
UAO	Unilateral Administrative Order
USACE	U.S. Army Corps of Engineers
VOCs	Volatile Organic Compounds

Executive Summary

The United States Environmental Protection Agency (EPA) Region IV has conducted a five-year review of the remedial actions implemented at the former Firestone Tire and Rubber Company plant in Dougherty County, Georgia. The facility is currently operated by Cooper Tire Company. Technical support for the review was provided by the U.S. Army Corps of Engineers, Savannah District. This report documents the results of the review, which was conducted from 16 May through 30 September 2005. This is the second five-year review for the Firestone Tire and Rubber Co. Superfund Site. The first five-year review was completed on 29 September 2000. The five-year review is required by CERCLA because the remedial action, upon completion, will not leave hazardous substances, pollutants, or contaminants on site above levels that allow for unlimited use and unrestricted exposure, but requires more than five years to complete. All remedies have been constructed and continue to operate as intended.

The Firestone Tire and Rubber Company Superfund Site is located in Dougherty County at 3300 Sylvester Road, approximately one mile east of Albany, Georgia. The facility, which encompasses 329.2 acres, is owned by the Albany-Dougherty Payroll Development Authority and was leased to the Firestone Tire and Rubber Company from 1968 to 1990. Pneumatic tires were manufactured at the facility from 1968 until 1986, when Firestone Tire and Rubber Company ceased operations. Cooper Tire subsequently purchased the site and currently conducts tire manufacturing operations at the plant.

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for ground water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected.

Based on the results of the ground-water monitoring program to date, suspension of the ground-water recovery system is recommended. As per the proposal by Premier Environmental Services, 6 December 2004, the ground-water recovery system should be maintained so that it can be pulsed episodically if necessary. The enhanced ground-water monitoring program should include two years of quarterly monitoring followed by annual monitoring

The remedy at the Firestone Tire and Rubber Co. (Albany Plant) is expected to be protective upon completion and in the interim; exposure pathways that could result in unacceptable risk are being controlled.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name: Firestone Tire and Rubber Company (Albany Plant)

EPA ID: GAD990855074

Region: IV State: GA City/County: Albany, Dougherty County

SITE STATUS

NPL status: Currently on the Final NPL

Remediation status (under construction, operating, complete): Operating

Multiple OUs*: Yes Construction completion date: 9/28/1998

Has site been put into reuse? Yes

REVIEW STATUS

Lead agency (EPA, State, Tribe Federal agency): EPA

Author name: Steven M. Bath, P.E.

Author affiliation: US Army Corps of Author title: Environmental Engineer

Engineers, Savannah District

Review period: 16 May 2005 to 31 August 2005

Date(s) of site inspection: 23 June 2005

Type of Review:

Policy

Review Number: 2 (Second)

Triggering action event: First Five-Year Review Completion Date

Trigger action date (from CERCLIS): 09/29/2000

Due date: 9/29/2005

^{* &}quot;OU" refers to operable unit.

Five -Year Review Summary Form, cont'd.

Issues:

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for ground water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected.

Recommendations and Follow-up Actions:

Continued ground-water monitoring is required to ensure contaminants are attenuating naturally. Based on the results of the ground-water monitoring program to date, suspension of the ground-water recovery system is recommended. As per the proposal by Premier Environmental Services, 6 December 2004, the ground-water recovery system should be maintained so that it can be pulsed episodically if necessary. The enhanced ground-water monitoring program should include two years of quarterly monitoring followed by annual monitoring

Protectiveness Statements:

The remedy at the Firestone Tire and Rubber Co. (Albany Plant) is expected to be protective upon completion and in the interim; exposure pathways that could result in unacceptable risk are being controlled.

Other Comments:

None

I. Introduction

The United States Environmental Protection Agency (EPA) Region IV has conducted a five-year review of the remedial actions implemented at the former Firestone Tire and Rubber Company plant in Dougherty County, Georgia. The facility is currently operated by Cooper Tire Company. Technical support for the review was provided by the U.S. Army Corps of Engineers, Savannah District. This report documents the results of the review, which was conducted from 16 May through 30 September 2005. The purpose of the five-year review was to determine whether the implemented remedies (soil remediation and ground water recovery) are protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review Reports. In addition, Five-Year Review Reports identify deficiencies found during the review, if any, and identify recommendations to address them.

EPA is overseeing this review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA §121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with Section 9604 (CERCLA §104) or Section 9606 (CERCLA §106) the President shall take action or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The EPA interpreted this requirement further in the NCP, as stated in 40 CFR 300.430(f)(4)(ii):

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

This is the second five-year review for the former Firestone Tire and Rubber Company site. The trigger for this second five-year review corresponds to EPA concurrence signature date of the first Five-Year Review Report, 29 September 2000. The five-year review is required by CERCLA because the remedial action, upon completion, will not leave hazardous substances, pollutants, or contaminants on site above levels that allow for unlimited use and unrestricted exposure, but requires more than five years to complete. All remedies have been constructed, and the operations and monitoring program continues to operate as designed.

II. Site Chronology

Table 1 lists the chronology of events for the Firestone Tire and Rubber Co. Superfund Site.

Table 1: Chronology of Site Events

Table 1: Chronology of S	SILE EVENTS	Completion		
Event	Start Date	Completion Date		
Firestone Tire and Rubber operates at the property	1968	1986		
Discovery		08/01/1980		
Preliminary Assessment		09/28/1985		
Site Inspection		09/30/1986		
Proposal to NPL		06/24/1988		
NPL RP Search	12/28/1987	08/11/1988		
Final Listing on NPL		10/04/1989		
RI/FS Negotiations	03/30/1990	06/29/1990		
Administrative Order on Consent		07/09/1990		
Removal Assessment		12/31/1992		
PRP Remedial Investigation/Feasibility Study	07/09/1990	06/24/1993		
Record of Decision		06/24/1993		
Administrative Records	12/28/1992	07/14/1993		
RD/RA Negotiations	07/06/1993	02/17/1994		
PRP Remedial Design	03/16/1994	07/27/1994		
Consent Decree	02/17/1994	08/08/1994		
PRP Remedial Action	07/27/1994	09/29/1995		
PRP Remedial Design	03/16/1994	06/28/1996		
Explanation of Significant Difference		03/1996		
PRP Remedial Action	06/28/1996	09/28/1998		
Preliminary Close-Out Report		09/28/1998		
First Five-Year Review	04/03/2000	09/29/2000		
Operations and Maintenance	04/30/1999			

III. Background

The Firestone Tire and Rubber Company Superfund Site is located in Dougherty County at 3300 Sylvester Road, approximately one mile east of Albany, Georgia. The facility, which encompasses 329.2 acres, was owned by the Albany-Dougherty Payroll Development Authority and was leased to the Firestone Tire and Rubber Company from 1968 to 1990. Pneumatic tires were manufactured at the facility from 1968 until 1986, when Firestone Tire and Rubber Company ceased operations. Cooper Tire subsequently purchased the site and currently conducts tire manufacturing operations at the plant. Land use in the area is predominantly industrial and commercial, with an onsite wetlands area.

The facility consisted of a 1,840,000 sq. ft. building with a courtyard area for material handling and shipping. The courtyard area contained underground storage tanks (USTs), transformers mounted on concrete pads and four above ground fuel storage tanks. In 1980, a 3,000 sq. ft. burn pit area located on the astern side of the site was built to collect runoff from a 6,000-gallon spill of an anti-oxidant. Material from the spill was subsequently pumped into 55-gallon drums and stored adjacent to the pit. Later in 1980, the drummed anti-oxidant and 65 drums of liquid waste cement were burned in the pit as part of a fire training exercise.

In preparation for cessation of operations in 1986, Firestone voluntarily performed initial assessment activities in 1985 of the courtyard and burn pit. Based on the results of these initial assessment activities, Firestone voluntarily conducted several interim remedial activities including removal and disposal of 441 yd³ of debris and 105 yd³ of contaminated soil, removal and disposal of transformers and USTs from the courtyard area, excavation of the burn pit and disposal of 160 drums containing a material similar to rubber cement, and installation and operation of an interim ground-water collection and treatment system. In October 1989, the United States Environmental Protection Agency (USEPA) listed the facility on the National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Bridgestone/Firestone, Inc. (BFS), on behalf of Firestone, subsequently entered into an Administrative Order by Consent with USEPA in 1990.

A Remedial Investigation/Feasibility Study (RI/FS) was conducted by BFS in accordance with the Administrative Order, and, on June 23, 1993, a Record of Decision (ROD) was issued by USEPA stipulating the selected Remedial Action (RA) for the site. The RA included removing approximately 25 cubic yards of polychlorinated biphenyl (PCB)-impacted soils and recovering ground water impacted with volatile organic compounds from the courtyard area. The PCB-impacted soils were removed in November 1994. The soil was excavated and placed directly into lined roll-off boxes that were covered with tarps and transported to an off-site permitted landfill. No other areas were identified in the ROD or RA.

In 1995, BFS conducted design activities for the purpose of preparing a ground-water recovery Remedial Design (RD) Report. Based on data obtained during these RD

activities, USEPA issued an Explanation of Significant Differences (ESD) in March 1996 that stipulated treatment of the recovered ground water was not required. The 100% RD Report was issued on April 19, 1996 and approved by USEPA on June 28, 1996. BFS subsequently submitted a Remedial Action Plan (RA Plan) to USEPA on July 26, 1996. This plan described the actions to be taken to implement the RD. On November 4, 1996 BFS began the implementation of the RA Plan for the ground-water collection system and construction was substantially complete by November 22, 1996. The Final Construction Report for the Ground-Water Collection system was submitted on January 15, 1998 and Final Operations and Maintenance manual was issued in November 3, 1998. Upon approval of the O & M manual, BFS initiated quarterly ground-water monitoring of the recovery and compliance wells. A map of the site is included with this report as Attachment B.

The purpose of the ground-water collection system is to reduce concentrations of the three constituents of concern detected in ground water (benzene, 1,1-dichloroethene, and 1,1,1-trichloroethane) exceeding clean-up levels specified in the ROD by extraction (and treatment, if necessary) and to prevent migration of these COCs from the courtyard area. The ground-water monitoring schedule required quarterly sampling for a year and annual ground-water monitoring thereafter. The quarterly monitoring events were performed in September 1999, December 1999, April 2000, and June 2000. The first annual ground-water monitoring event occurred in September 2000.

The first five-year review was conducted during fiscal year 2000 and found the remedy to still be protective of human health and the environment.

IV. Remedial Actions

Remedy Selection

The only record of decision (ROD) for the Firestone Tire and Rubber Company site was signed on June 23, 1993. The ROD stipulated the selected remedial action for ground water (pump and treat) and soils (excavation) in the courtyard area and stipulated future study of four inorganic compounds and carbon disulfide detected in ground water during the RI.

The purpose of the selected remedy was to prevent current and future exposure to contamination by treating the soil and ground water to reduce movements of contaminants. The primary contaminants of concern affecting the soil and ground water were VOCs, including benzene, tetrachloroethene, toluene, and xylenes; other organics, including PCBs; and metals, including chromium and lead.

The selected remedial action for this site included excavating and disposing of approximately 20 cubic yards of PCB-contaminated soil with concentrations above 10 mg/kg at an offsite TSCA-permitted landfill; backfilling the excavated areas with clean material; extracting contaminated ground water and filtering out any solids; treating the extracted ground water onsite using air stripping, followed by offsite discharge to a local POTW; monitoring ground water; and implementing institutional controls, including deed and ground-water use restrictions.

The estimated present worth cost for this remedial action at the time of the ROD was \$2,036,000. This cost included the design, construction, implementation of the remedial action, two years of post remediation monitoring, and the decommissioning of the wells. The duration of the remedial activities was estimated to be four years.

Soil contaminated with PCBs that exceeded 10 mg/kg was excavated and transported to a TSCA permitted landfill. Chemical specific ground-water cleanup goals were based on the Safe Drinking Water Act Maximum Contaminant Levels (MCLs), action levels and a 10⁻⁶ risk level.

The major components of the selected remedy included:

- Excavation of the PCB contaminated soils until established cleanup levels were reached with disposal in an off-site permitted landfill. Backfilling the excavated areas with clean fill material.
- Extraction and treatment of contaminated ground water using existing wells and supplemental wells if necessary
- The contaminated ground water will be treated using on-site air stripping.
- Discharge of the water to the local Publicly Owned Treatment Works (POTW)
- Periodic ground-water monitoring to assess the effectiveness of the remedy
- Institutional controls will be placed on well construction and water use on the site.

Remedy Implementation

PCB-impacted soils were excavated from the Courtyard area in November 1994, as discussed in the Soil Remediation Report (LAW, 1994). The ground-water monitoring study investigating the four inorganics and carbon disulfide was completed in 1995, and a revised report, Technical Memorandum Report (TMR) of the Inorganics Monitoring Study, was issued on May 20, 1996. The TMR addressed the USEPA's comments in their conditional-approval letter of the TMR received by BFS on April 19, 1996. The study determined that the inorganic compounds and carbon disulfide were not present in ground-water samples obtained from site monitoring wells at concentrations exceeding the ROD-specified clean-up levels. Previously detected, elevated concentrations of the inorganic compounds were the result of sediment entrained in the ground-water samples due to surging of the wells during purging. The use of currently accepted sampling methods resolved this issue.

The Explanation of Significant Difference changed the remedy to omit ground-water treatment from the primary portion of the cleanup as long as the contaminant levels in the ground water do not exceed permit discharge limits for the POTW. The ground-water recovery system was constructed in 1997 in accordance with the USEPA-approved Remedial Design documents. The final construction report was issued in January 1998 and the one year of quarterly monitoring was initiated in September 1999. In accordance with the system performance standards, annual ground-water monitoring began in September 2000.

System Operations/O&M

The ground-water recovery system has operated as designed requiring only minor maintenance and repairs to system components. Operation and maintenance of the ground-water recovery system and ground-water monitoring cost approximately \$35,000 per year for the last five year period. Ground-water monitoring costs have increased slowly as expected during this time frame. Maintenance costs for the recovery system have varied slightly from year to year as minor parts of the recovery system have required repair or replacement. These costs are within the range of reasonable expected costs and do not indicate any problems with the selected remedy.

V. Progress Since Last Review

The ground-water extraction system continues to operate as designed. Annual ground-water monitoring indicates the three constituents of concern are continuing to attenuate naturally as expected. Based on the results of the September 2004 Annual Report, only two wells contained constituents above the ROD specified clean-up levels. Monitoring wells MW-1-3 and PTW-1 both contained 1,1-dichloroethene above its MCL of 7 ug/L. The first Five-Year Review Report made two recommendations. The first recommendation was to continue with current recovery system operation and ground-water monitoring. Recovery system operation and ground-water monitoring have continued as specified in the ROD. The second recommendation was to evaluate trends in the COC concentrations and modify system operation as appropriate.

In April 2004, Premier Environmental Services submitted a proposal to modify the existing ground-water recovery system. The proposal included the following elements: 1) suspend operation of the ground-water recovery system and maintain the system to be pulsed episodically if needed; 2) enhanced ground-water monitoring consisting of quarterly monitoring for the first two years after suspending operation of the system and annually thereafter to monitor COC migration; 3) submit summary reports after each ground-water sampling event instead of current monthly reports. The State and EPA have reviewed the proposal and made recommendations. Based on these recommendations, the revised proposal will include periodic pulsing of the recovery system with an enhanced ground water sampling program to monitor the effectiveness of pulsing the recovery system. Pulsing of the recovery system will begin with a sampling event then cycle through periods of no pulsing, sampling, and then return to pulsing. The duration of the cycle will begin with quarterly periods then move to semi-annual and then annual as approved by the State and EPA. The proposal is expected to include action levels for specific contaminants that if exceeded will trigger a restart of the recovery system.

Actions Taken Since Last Five-Year Review

Recommendation from Previous Review	Party Responsible	Milestone Date	Action Taken and Outcome
Continue with remedy and monitoring.	PRP	None given.	Operation of the ground-water recovery system and monitoring has continued.
Review monitoring data and modify system operation as appropriate.	PRP	None given	Data was reviewed and a proposal to modify the recovery system was submitted to EPA. EPA has reviewed the proposal and made recommendations.

VI. Five-Year Review Process

The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. A five-year review does not reconsider decisions made during the selection of the remedy, but evaluates the implementation and performance of the selected remedy.

Administrative Components

The Firestone Tire and Rubber Company Five-Year Review Team was led by Charles King of EPA, Remedial Project Manager for the site. Technical expertise for the review was provided by Steven Bath, Environmental Engineer, and Mark Harvison, Chemist, both with the Corps of Engineers, Savannah District. The schedule for the review extends through 31 December 2005. The components of the review included:

- Community notification;
- Document Review;
- Data Review;
- Site Inspection;
- Local Interviews; and
- Five-Year Review Report Development and Review.

Community Notification and Involvement

The Firestone Site occupies a very small portion of the Cooper Tire Plant in an industrial area of Albany. As such, it has drawn little public concern or involvement since remediation began. A public availability session was held in 1999 to address any question the community had about the site. Bridgestone/Firestone has also requested a similar community meeting be held to discuss ground-water monitoring results and the proposal to modify the recovery system. This community meeting has not been scheduled yet. To invite public comment about the site, the Five-Year Review Report will be placed in the Dougherty County Library which serves as the information repository for the project and a public notice will be placed in the local newspaper announcing its availability for review and comment. A copy of the Public Notice is provided in Attachment G.

Document Review

On 20-21 June 2005, Steven Bath, and Mark Harvison, with the US Army Corps of Engineers (USACE), Savannah District, met with the EPA Project Manager, Charles King, and began reviewing the project files. Documents that were reviewed were related to site investigations, feasibility studies, and remedial design, the RODs, construction reports, operation and maintenance plans and monitoring data. The complete list of documents is included in Attachment A.

ARAR Review

The following applicable or relevant and appropriate requirements (ARARs) were reviewed for changes that could affect the protectiveness of the selected remedy:

- Clean Water Act Ambient Water Quality Criteria Requirements
- Clean Water Act Water Quality Standards
- Safe Drinking Water Act Federal Maximum Contaminant Levels (MCLs)
- Georgia Drinking Water Regulations Chapter 391-3-5
- Georgia Water Quality Control Regulations and Standards

As per EPA guidance, only those ARARs that address risk posed to human health or the environment need be reviewed. ARAR Analysis: As of the time of this five-year review, only one of the standards requiring review has changed (see Section VII Technical Assessment ARAR Comparison Table). A review of standards identified as ARARs in the ROD was completed as well as a review of new standards promulgated since the signing of the ROD. No changes to existing ARARs or potential new ARARs affecting the protectiveness of the remedy were identified.

Data Review

Annual ground-water monitoring has continued at the site since the last five-year review. Ground water samples are analyzed for 1,1-dichloroethene, 1,1,1-trichloroethane, and benzene. Results of the ground-water monitoring indicate the three constituents of concern are continuing to attenuate naturally as expected. Based on the results of the September 2004 Annual Report, only two wells contained constituents above the ROD specified clean-up levels. Monitoring wells MW-1-3 and PTW-1 both contained 1,1-dichloroethene above its MCL of 7 ug/L at concentrations of 8.7 ug/L and 100 ug/L respectively.

A summary of the data from past sampling events is presented in Attachment C.

Site Inspection

On 23 June 2005, Steven Bath, and Mark Harvison, with the US Army Corps of Engineers (USACE), Savannah District, traveled to the Albany, Georgia to inspect the site. Mr. Steve Holmes of Cooper Tire escorted us around the property. Ms. Mary Ann Brookshire, Environmental Scientist with Premier Environmental Services, met us at the site and briefed us on the ground-water monitoring activities at the site and the ground-water recovery system. All of the monitoring wells were visually examined and appeared to be intact and secured. The ground-water recovery system was also inspected and was found to be working properly. There were no indications of any problems at the site. No deficiencies were noted during the site inspection. The site inspection checklist is included in Attachment D. Site photographs are included in Attachment E.

Interviews

During the site inspection, Steven Bath and Mark Harvison interviewed Mr. Steve Holmes of Cooper Tire and Ms. Mary Ann Brookshire of Premier Environmental Services. Mr. Holmes stated that Cooper Tire had no problems or issues with the monitoring wells or the recovery system. Ms. Brookshire stated that the ground-water recovery system was functioning as intended and there were no known problems at the site with either the monitoring well network or the ground-water recovery system. Ms. Brookshire provided the latest round of sampling data for the site. Neither Mr. Holmes nor Ms. Brookshire was aware of any community concerns over the current operation of the remedy.

Mr. Thomas Thomas, Assistant County Administrator for Dougherty County was also interviewed about the site. Mr. Thomas stated that he had never received any complaints nor was he aware of any public concerns about the Firestone Site. Mr. Thomas also stated that he was sure his office would have heard if there were any community concerns with the site.

Mr. Mauri Centis with Georgia EPD was also contacted about the site. Mr. Centis provides State regulatory oversight of the project. Mr. Centis stated that the State does not have any concerns or issues with the way the remedy is being implemented at the site. Mr. Centis was aware that a proposal had been made to modify the recovery system operation and ground-water monitoring. He thought that the recommendations provided by EPA were appropriate for the site. Mr. Centis also stated that he is not aware of any public concerns over the site.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents, ARARs, risk assumptions and analytical data and site inspections indicate the remedy is functioning as intended by the ROD and cleanup levels are being achieved. The operating procedures implemented at the site will continue to maintain the effectiveness of the response action. There are no indicators of issues or problems that could place the protectiveness of the remedy at risk. The proposal to modify the recovery system operation is an appropriate procedure to optimize the performance of the system by reducing system cost. Institutional and access controls are in place to prevent possible exposure to ground water. Copies of institutional controls are included as Attachment F. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected.

Check	clist for question A: Is the remedy functioning as intended by the decision						
documents?							
Reme	dial Action Performance						
Yes	Does the remedial action continue to operate and function as designed?						
Yes	Is the remedial action performing as expected and are cleanup levels being achieved?						
Yes	Is containment effective?						
Syster	n Operations /O&M						
Yes	Will operating procedures as implemented maintain the effectiveness of response actions?						
None	Are there large variances in O&M cost that could indicate a potential remedy problem or remedy issue?						
Oppor	rtunities for Optimization						
Yes	Do opportunities exist to improve the performance and/or reduce the cost of monitoring sampling, and treatment systems?						
Early	indicators of Potential Issues						
No	Do frequent equipment changes or breakdown indicate a potential problem?						
No	Do issues or problems place protectiveness at risk?						
Imple	Implementation of Institutional Controls and Other Measures						
Yes	Are access controls in place to prevent exposure?						
Yes	Are institutional controls in place to prevent exposure?						
None	Are other actions necessary to ensure that immediate threats have been addressed?						

Question B: Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

No standards identified in the ROD or TBCs used in selecting cleanup levels have changed to call into question the protectiveness of the remedy. There have been no changes in the site or surrounding properties that would affect the protectiveness of the remedy. No new contaminants or contaminant sources have been identified on the site. There have been no changes in contaminant characteristics or toxicity factors. Standardized risk assessment methodologies have not changed in any way that would affect the protectiveness of the remedy. The remedy is progressing as expected.

Check	Checklist for question B: Are the exposure assumptions, toxicity data, cleanup levels						
and re	emedial action objectives (RAOs) used at the time of the remedy selection still						
valid?							
Chang	ges in Standards and TBCs						
No	Have standards identified in the ROD been revised to call into question the						
	protectiveness of the remedy?						
No	Do newly promulgated standards call into question the protectiveness of the						
	remedy?						
No	Have TBCs used in selecting cleanup levels at the site changed to affect the						
	protectiveness of the remedy?						
Chang	ge in Exposure Pathways						
No	Has land use or expected land use on or near the site changed?						
No	Have human health or ecological routes of exposure or receptors been newly						
	identified or changed in a way that could affect the protectiveness of the remedy?						
None	Are there any newly identified contaminants or contaminant sources?						
No	Are there any unanticipated toxic byproducts of the remedy not previously						
	addressed by the decision documents?						
No	Have physical site conditions or the understanding of these conditions changed in						
	a way that could affect the protectiveness of the remedy?						
	e in Toxicity and Other Contaminant Characteristics						
No	Have toxicity factors for contaminants of concern at the site changed in a way						
	that could affect the protectiveness of the remedy?						
No	Have other contaminant characteristics changed that could affect the						
	protectiveness of the remedy?						
	es in Risk Assessment Methods						
No	Have standardized risk assessment methods changed in a way that could affect						
	the protectiveness of the remedy?						
Expect	ted Progress Towards meeting RAOs						
Yes	Is the remedy progressing as expected?						

Evaluation of Changes in ARARs or Standards Since the Date of the ROD: A comparison of current standards against those listed in the RODs was performed. The following tables present the ROD standards and current standards for comparison.

ARAR COMPARISON TABLE									
сос	Standard as Stated in ROD	Current Federal MCL	Current Georgia State MCL	Changes in Standards					
Benzene	Fed MCL – 5 ug/L	5 ug/L	5 ug/L	None					
1,1-Dichloroethene	Fed MCL – 7 ug/L	7 ug/L	7 ug/L	None					
1,1,1-Trichloroethene	Fed MCL –200 ug/L	200 ug/L	200 ug/L	None					

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No additional information has been identified that would call into question the protectiveness of the remedy.

ı	Checklist for question C: Has any other information come to light that could call						
	into question the protectiveness of the remedy? Other Information						
No	Have newly identified ecological risk been found?						
No	Are there any impacts from natural disasters?						
No	Has any other information come to light that could affect the protectiveness of the remedy?						

Technical Assessment Summary

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for ground water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. Based on the results of the ground-water monitoring program to date, periodic pulsing of the ground-water recovery system with enhanced ground-water monitoring is recommended. The revised proposal will include periodic pulsing of the recovery system with an enhanced ground water sampling program to

monitor the effectiveness of pulsing the recovery system. Pulsing of the recovery system will begin with a sampling event then cycle through periods of no pulsing, sampling, and then return to pulsing. The duration of the cycle will begin with quarterly periods then move to semi-annual and then annual as approved by the State and EPA. The proposal is expected to include action levels for specific contaminants that if exceeded will trigger a restart of the recovery system.

VIII. Issues

	Currently Affects	Affects Future
Issue	Protectiveness (Y/N)	Protectiveness (Y/N)
Ground-water recovery system modification	N	N

IX. Recommendations and Follow-up Actions

Recommendation/ Follow-Up	Party	Oversight	Milestone	Protect (Y	ects tiveness (N)
Actions	Responsible	Agency	Date	Current	Future
Recommend periodic pulsing				ļ	
of the ground-water recovery	PRP	EPA	9/30/2006	N	N
system with enhanced ground-					
water monitoring to ensure the					
site remains protective of					
human health and the					
environment.			!		

X. Protectiveness Statement

The remedy at the Firestone Tire and Rubber Co. (Albany Plant) is expected to be protective upon completion and in the interim; exposure pathways that could result in unacceptable risk are being controlled.

XI. Next Review

The next Five-Year Review for the Firestone Tire and Rubber Co. (Albany Plant) Site is required to be completed within five years of the approval date of this review.

Attachment A

Documents Reviewed

ATEC Associates, Inc., Technical Memorandum Report for the Inorganics Monitoring Study, Firestone Tire and Rubber Facility, Albany Georgia, Marietta, Georgia, May 1996 (revised).

ATEC Associates, Inc., Remedial Action Plan for the Ground-Water Collection System, Firestone Tire and Rubber Company Site, Albany, Georgia, Marietta, Georgia, July 1996.

ATC Associates, Inc., Final Construction Report for the Ground-Water Collection System, Former Firestone Tire and Rubber Company Site, Albany, Georgia, Marietta, Georgia. January 1998.

Law Environmental, Inc., Soil Remediation Work Plan, Firestone Tire and Rubber Company Superfund Site, Albany Georgia, Kennesaw, Georgia, April 1994

Law Environmental, Inc., Soil Remediation Report, Firestone Tire and Rubber Company Superfund Site, Albany Georgia, Kennesaw, Georgia, December 1994.

Law Environmental, Inc., Detailed Sampling and Analysis Plan, Firestone Tire and Rubber Company Superfund Site, Albany Georgia, Kennesaw, Georgia, 1995.

Law Environmental, Inc., 100% Remedial Design Report for the Ground-Water Collection System, Firestone Tire and Rubber Company Superfund Site, Albany Georgia, Kennesaw, Georgia, April 1996.

Premier Environmental Services, LLC, Remedial Action Progress Reports, Former Firestone Tire and Rubber Site, Albany, Georgia, Marietta, Georgia, April 1999 through September 2004.

Premier Environmental Services, LLC, Proposal for Groundwater System Operational Study, Former Firestone Tire and Rubber Site, Albany, Georgia, Marietta, Georgia, June 2001.

Premier Environmental Services, LLC, Proposal for Groundwater Recovery System Modification, Former Firestone Tire and Rubber Site, Albany, Georgia, Marietta, Georgia, April 2004.

US Department of Health and Human Services, Preliminary Health Assessment for Firestone Tire and Rubber Company, Inc., Albany Georgia, May 1991.

US Environmental Protection Agency, Region IV, Modification to the Administrative Order By Consent, in the Matter of Firestone Tire and Rubber Company, Albany Georgia, August 1991.

US Environmental Protection Agency, Region IV, Superfund Record of Decision: Firestone Tire and Rubber Company (Albany Plant), Albany Georgia, June 1993.

US Environmental Protection Agency, Region IV, Explanation of Significant Difference Fact Sheet, Firestone Tire and Rubber Company Superfund Site, Albany Georgia, June 1993.

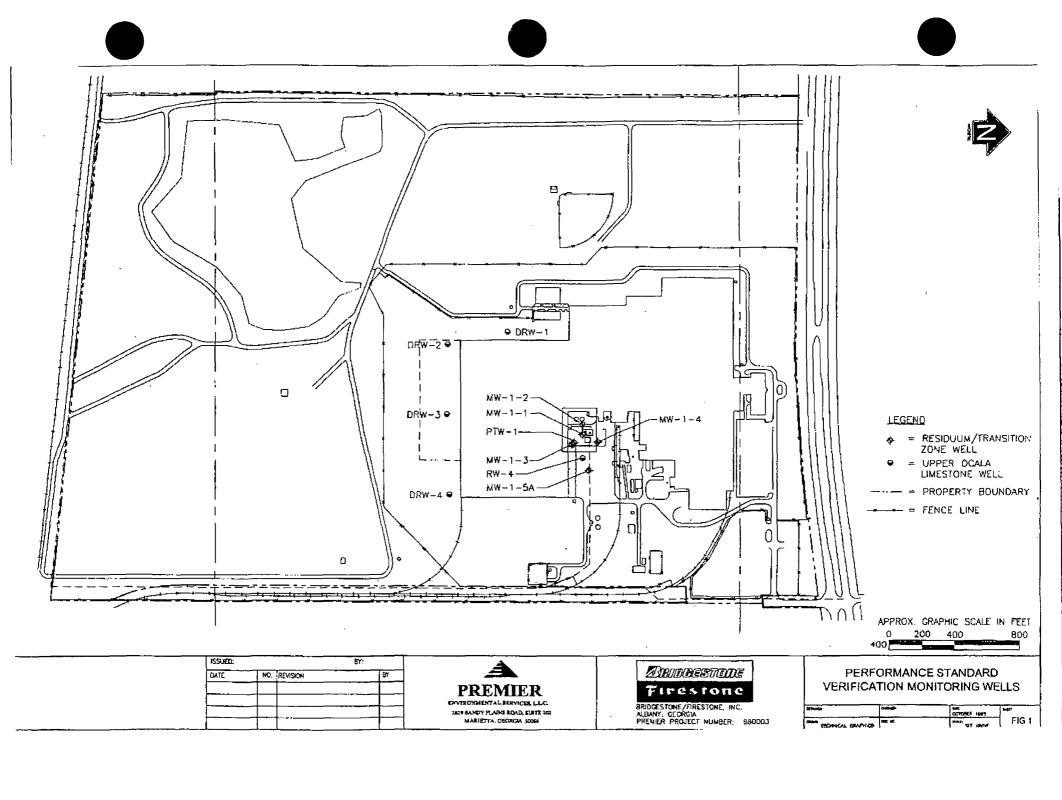
Woodward-Clyde, Draft Interim Summary Report, Site Investigations and Interim Remedial Measures, Former Firestone Tire and Rubber Company Facility, Albany, Georgia, Solon, Ohio, May 1990.

Woodward-Clyde, Final Remedial Investigation Report, Former Firestone Tire and Rubber Company Facility, Albany, Georgia, Chicago, Illinois, May 1992.

Woodward-Clyde, Addendum to the Remedial Investigation Report, June 1992 Groundwater and Soil Sampling, Former Firestone Tire and Rubber Company Facility, Albany, Georgia, Chicago, Illinois, August 1992.

Woodward-Clyde, Feasibility Study, Former Firestone Tire and Rubber Company Facility, Albany, Georgia, Solon, Ohio, December 1992 (revised).

Attachment B Site Map



Attachment C Ground-Water Data



Sample ID	Target	Federal	Aug	Nov	Sept	Dec	Apr	Jun	Sept	Sept	Sept	Sept	Sept
	Analyte	MCL	1991	96	99	99	2000	2000	2000	2001	2002	2003	2004
		μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
Remediation	n System Wells												
MW-1-1	1,1,1-Trichloroethane	200	15	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0
	1,1-Dichloroethene	7	6	< 5.0	7.1	12	15	15	11	8.1	6.8	<1.0	1.1
	Benzene	5	71	33.9	7.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1-2	1,1,1-Trichloroethane	200	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
	1,1-Dichloroethene	7	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
	Benzene	5	31	32.4	2.4	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
MW-1-3	1,1,1-Trichloroethane	200	560	74.6	12	16	7.9	7.9	12	5.7	<5.0	1.2	<1.0
1414-1-5	1,1-Dichloroethene	7	1400	648	290	320	200	200	260	200	170	47	8.7
	Benzene	5	<50	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0
PTW-1	1,1,1-Trichloroethane	200	220	39.5	18	14	13	6	6	<10	<10	1.9	1.2
	1,1-Dichloroethene	7	130	397	520	370	540	240	290	340	320	240	100
	Benzene	5	<10	<5.0	<10	<1.0	<10	<5.0	<5.0	<10	<10	<1.0	<1.0
Compliance	: Wells												
DRW-1	1,1,1-Trichloroethane	200		<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethene	7	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Benzene	5	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0
DRW-2	1,1,1-Trichloroethane	200	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
27(11.2	1,1-Dichloroethene	7	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0
	Benzene	5	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.2	<1.0	<1.0	<1.0



Sample ID	Target	Federal	Aug	Nov	Sept	Dec	Apr	Jun	Sept	Sept	Sept	Sept	Sept
	Analyte	MCL	1991	96	99	99	2000	2000	2000	2001	2002	2003	2004
		μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
DRW-3	1,1,1-Trichloroethane	200	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethene	7	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Benzene	5	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DRW-4	1,1,1-Trichloroethane	200	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethene	7	<5.0	< 5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Benzene	5	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1-4	1,1,1-Trichloroethane	200	<.5	<5.0	<1.0	<1.0	dry	dry	dry	dry	dry	<1.0	<1.0
	1,1-Dichloroethene	7	24	<5.0	2.4	10	dry	dry	dry	dry	dry	<1.0	<1.0
	Benzene	5	86	12.2	9.5	4.5	dry	dry	dry	dry	dry	4.4	2.1
MW-1-5A	1,1,1-Trichloroethane	200		<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethene	7		<5.0	4.7	4.7	3.9	3.9	2.7	2.8	2	3.1	2.6
	Benzene	5		<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RW-4	1,1,1-Trichloroethane	200	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethene	7	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Benzene	5	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Attachment D Site Inspection Checklist

Site Inspection Checklist

I. SITE INFORMATION						
Site name: Firestone Tire and Rubber Site	Date of inspection:23 June 2005					
Location and Region: Albany, Dougherty County, GA	EPA ID: GAD 990855074					
Agency, office, or company leading the five-year review: EPA	Weather/temperature: Sunny and warm					
Remedy Includes: (Check all that apply) Landfill cover/containment						
Attachments: Inspection team roster attached see	eport Site map attached see report					
II. INTERVIEWS	(Check all that apply)					
1. O&M site manager Mary Ann Brookshire Senio Name Interviewed X at site at office by phone Pho Problems, suggestions; Report attached See Five —	Title Date					
Name Interviewed at site at office by phone Pl Problems, suggestions; Report attached	Title Date					

Agency Georgia EPD Contact Mauri Centis	*****	 Regulator	12 Dec 05	404 (51 7525	
Name	 	Title	Date	404-651-7525 Phone no	
Problems; suggestions; Rej	port attached		Date		
No issues with remedy. No					
Agency Dougherty Cour	ntv				
Contact Thomas Thomas		ınty Adminstrator	7 Dec 05	229-431-21	
Name		Title	Date	Phone n	
Problems; suggestions; Rep	port attached				
No Issues with Site. Not a	ware of any pub	lic concerns			
Agency					
Agency	·				
ContactName		Title	Date	Phone no	
Problems; suggestions; Rep	ort attached				
Agency					
Contact					
Name		Title		Phone no	
Problems; suggestions; Rep	oort attached				
Other interviews (optional)	Report attached	d.			
					
					
		·			
	•			····	

	O&M Documents	D - 21 - 21-11	TT	NT/A	
	O&M manual	Readily available	Up to d		
	As-built drawings	Readily available	Up to d		
	Maintenance logs	Readily available	Up to d	ate N/A	
	Remarks <u>Documents are not</u>	stored on-site			
	Site-Specific Health and Safety Pl	lan Readily av	vailable	Up to date	N/A
	Contingency plan/emergency resp Remarks <u>Documents are re</u>			Up to date	N/A
	O&M and OSHA Training Recor			Up to date	N/A
	Permits and Service Agreements Air discharge permit	Readily available	Up to d	ate x N/A	
	Effluent discharge	Readily available	Up to d		
	x Waste disposal, POTW		-	ate N/A	
			Up to d		
	Other permits	are not stored on-site			
	Gas Generation Records Remarks_	_	Up to d	ate x N/A	
	Settlement Monument Records Remarks	Readily availal		Up to date	x N/A
	Groundwater Monitoring Record Remarks Documen		ble	Up to date	N/A
	Leachate Extraction Records Remarks	Readily availab	ble	Up to date	x N/A
	Discharge Compliance Records	· _ · _ · · · · · · · · · · · · · · · ·			
	Air	Readily availab	ole	Up to date	x N/A
	Water (effluent) Remarks Documents	Readily availab are not stored on-site		Up to date	N/A
).	Daily Access/Security Logs	x Readily availab	ole x	Up to date	N/A

	IV. O&M COSTS	S					
1.	O&M Organization State in-house Contractor for State PRP in-house X Contractor for PRP Federal Facility in-house Contractor for Federal C						
2.	O&M Cost Records Readily available Up to date Funding mechanism/agreement in place Original O&M cost estimate Breakdown attached Total annual cost by year for review period if available						
	From To Date Date Total cost From To Total cost From To Total cost From To Total cost From Date Date Total cost From To Total cost From Date Total cost	G Breakdown attached					
3.	Unanticipated or Unusually High O&M Costs During Describe costs and reasons: None See Report V. ACCESS AND INSTITUTIONAL CONT						
A. Fen	cing						
1.	Fencing damaged Location shown on site map Remarks No damage was detected during the site	X Gates secured N/A e inspection					
B. Oth	er Access Restrictions						
1.	1. Signs and other security measures Location shown on site map X N/A Remarks Property is controlled by Cooper Tire						

C. Ir	nstitutional Controls (ICs)			
1.	Implementation and enforcement			
	Site conditions imply ICs not properly implemented	Yes	x No	N/A
	Site conditions imply ICs not being fully enforced	Yes	x No	N/A
	Type of monitoring (e.g., self-reporting, drive by) Self Reporting			_
	Frequency Semi Annual			
	Responsible party/agency PRP	22 Tum (15	770 072 2100
	Contact Mary Ann Brookshire Environmental Scientist Name Title	Date		Phone no.
	Name Title	Date		Phone no.
	Reporting is up-to-date	Yes	No	N/A
	Reports are verified by the lead agency	Yes	No	N/A
	a of the second			
	Specific requirements in deed or decision documents have been met	x Yes	No	N/A
	Violations have been reported	Yes	No	x N/A
	Other problems or suggestions: Report attached			
2.	Adequacy X ICs are adequate ICs are inadeq	uate		N/A
•	Remarks			
D. G	eneral			
1	V-d-li/4in Yii			
1.	1 0	andalism e	vident	
	Remarks			· · · · · · · · · · · · · · · · · · ·
				
2.	Land use changes on site X N/A			
	Remarks			
3.	Land use changes off site X N/A			
	Remarks			
	10114110			
	VI. GENERAL SITE CONDITIONS			
				· · · · · · · · · · · · · · · · · · ·
A. Re	pads x Applicable N/A			
1.	Roads damaged X Location shown on site map X Road	ls adequate	;	N/A
	Remarks	-		
				-

	Remarks Site was in	n good condition and well maintained
_	VII. I	LANDFILL COVERS Applicable x N/A
a	andfill Surface	
	Settlement (Low spots) Areal extent Remarks	Location shown on site map Settlement not evident Depth
_	Cracks Lengths W Remarks	Location shown on site map Cracking not evident Vidths Depths
_	Erosion Areal extent Remarks	Location shown on site map Erosion not evident Depth
_	Holes Areal extentRemarks	Location shown on site map Holes not evident Depth
_	Trees/Shrubs (indicate size	Grass Cover properly established No signs of strest e and locations on a diagram)
-	Alternative Cover (armored Remarks	d rock, concrete, etc.) N/A
-	Bulges Areal extent	Location shown on site map Bulges not evident Height

8.	Wet Areas/Water Damag Wet areas Ponding Seeps Soft subgrade Remarks	Location shown on site map Location shown on site map Location shown on site map Location shown on site map	vident Areal extent Areal extent Areal extent Areal extent
9.	Areal extent	lides Location shown on site map	No evidence of slope instability
В. Веп	(Horizontally constructed r	able X N/A nounds of earth placed across a steep land relocity of surface runoff and intercept an	
1.	Flows Bypass Bench Remarks	Location shown on site map	N/A or okay
2.	Bench Breached Remarks	Location shown on site map	N/A or okay
3.	Bench Overtopped Remarks	Location shown on site map	N/A or okay
C. Let		n control mats, riprap, grout bags, or gabioallow the runoff water collected by the be	
1.	Settlement Areal extent Remarks	Depth	evidence of settlement
2.	Material Degradation Material type Remarks		evidence of degradation
3.	Erosion Areal extent Remarks	Location shown on site map No Depth	evidence of erosion

4.	Undercutting Location shown on site map No evidence of undercutting Areal extent Depth Remarks	
5.	Obstructions Type No obstructions Location shown on site map Areal extent Size Remarks	
6.	Excessive Vegetative Growth No evidence of excessive growth Vegetation in channels does not obstruct flow Location shown on site map Remarks	
D.	Cover Penetrations Applicable X N/A	
1.	Gas Vents Active Passive Properly secured/locked Functioning Routinely sampled Good condition Evidence of leakage at penetration Needs Maintenance N/A Remarks	
2.	Gas Monitoring Probes Properly secured/locked G Functioning Routinely sampled Good condition Evidence of leakage at penetration Needs Maintenance N/A Remarks	
3.	Monitoring Wells (within surface area of landfill) Properly secured/locked G Functioning Routinely sampled Good condition Evidence of leakage at penetration Needs Maintenance N/A Remarks	
4.	Leachate Extraction Wells Properly secured/locked G Functioning Routinely sampled Good condition Evidence of leakage at penetration Needs Maintenance N/A Remarks	
5.	Settlement Monuments Located Routinely surveyed N/A Remarks	

E. Gas Collection and Treatment Applicable x N/A					
1.	D	struction C faintenance	ollection for re		
2.	Gas Collection Wells, Manifol Good condition Needs M Remarks	laintenance			
3.	Gas Monitoring Facilities (e.g Good condition Needs M Remarks	laintenance N	/ A		
F. Co	ver Drainage Layer	Applicable	x N/A		
1.	Outlet Pipes Inspected Remarks	Functionin	g	N/A	
2.	Outlet Rock Inspected Remarks	Functionin		N/A	
G. De	etention/Sedimentation Ponds	Applicable	x N/A		
1.	Siltation Areal extent Siltation not evident Remarks	-	th		N/A
2.	Erosion Areal extent Depth Erosion not evident Remarks				
3.	Outlet Works Fu Remarks	nctioning N			
4.	Dam Fu Remarks_	nctioning N			

H. Retaining Walls		Applicable x N/A
1.	Deformations Horizontal displacement Rotational displacement Remarks	Location shown on site map Deformation not evident Vertical displacement
2.		Location shown on site map Degradation not evident
I. Peri	meter Ditches/Off-Site Disc	harge Applicable x N/A
1.	Areal extent	n shown on site map Siltation not evident Depth
2.	Vegetation does not imper Areal extent	
3.	Erosion Areal extent Remarks	
4.	Discharge Structure Remarks	
	VIII. VERT	ICAL BARRIER WALLS Applicable x N/A
1.	Areal extent	Location shown on site map Settlement not evident Depth
2.	Performance not monitore	Evidence of breaching

C.	Treatment System x Applicable N/A	
1.	Treatment Train (Check components that apply) Metals removal Oil/water separation Bioremediation Air stripping Carbon adsorbers Filters Additive (e.g., chelation agent, flocculent) Others X Good condition Needs Maintenance X Sampling ports properly marked and functional Sampling/maintenance log displayed and up to date X Equipment properly identified Quantity of groundwater treated annually Quantity of surface water treated annually Remarks	-
2.	Electrical Enclosures and Panels (properly rated and functional) N/A X Good condition Needs Maintenance Remarks	
3.	Tanks, Vaults, Storage Vessels x N/A Good condition Proper secondary containment Needs Maintenance Remarks	-
4.	Discharge Structure and Appurtenances N/A X Good condition Needs Maintenance Remarks	
5.	Treatment Building(s) N/A X Good condition (esp. roof and doorways) Needs repair Chemicals and equipment properly stored Remarks	
6.	Monitoring Wells (pump and treatment remedy) x Properly secured/locked x Functioning Routinely sampled x Good condition x All required wells located Needs Maintenance N/A Remarks	
D. 1	Ionitoring Data	
1.	Monitoring Data X Is routinely submitted on time X Is of acceptable quality	
2.	Monitoring data suggests: x Groundwater plume is effectively contained x Contaminant concentrations are declining	

D. N	Monitored Natural Attenuation			
1.	Monitoring Wells (natural attenuation remedy) x Properly secured/locked x Functioning x Routinely sampled x Good condition x All required wells located Needs Maintenance N/A Remarks			
	X. OTHER REMEDIES			
	If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.			
	XI. OVERALL OBSERVATIONS			
A.	Implementation of the Remedy			
	Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).			
	Remedy is functioning as designed.			
B.	Adequacy of O&M			
	Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.			
	The site was well maintained. All monitoring wells were in good condition			

C.	Early Indicators of Potential Remedy Problems		
	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.		
	No indicators of potential remedy problems		
D.	Opportunities for Optimization		
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.		
	Optimize ground-water recovery system operation and monitoring plan.		

Attachment E Site Photographs

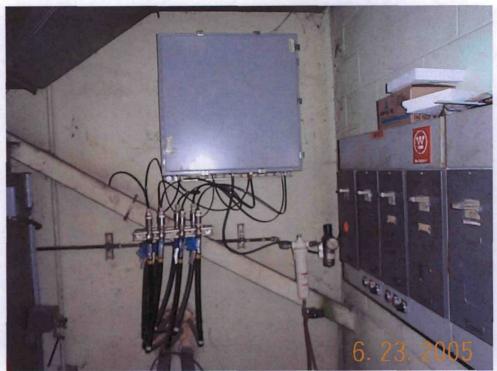


Photo: Extraction system control panel



Photo: Extraction equipment piping at recovery well PTW-1



Photo: Recovery wells PTW-1 and MW-1-3



Photo: Looking from the courtyard at MW-1-1 and toward recovery well PTW-1



Photo: Monitoring well box for MW-1-2



Photo: Monitoring well MW-1-4

Attachment F Institutional Controls



2625 Sandy Plains Road Suite 201 Marietta, GA 30066

Phone 770.973.2100 Fax 770.973.7395 www.premiercorp-usa.com

July 19, 2004

Mr. Charles L. King, Jr. Remedial Project Manager, South Superfund Branch **USEPA Region IV** Atlanta Federal Center 100 Alabama Street, SW Atlanta, Georgia 30303-3104

Subject:

Results of Title Search

Former Firestone Tire and Rubber Company Site

Albany, Georgia

Premier Project 980003

Dear Mr. King:

Premier Environmental has performed a title search on behalf of Bridgestone/Firestone North American Tire, LLC (BFS) to verify if a deed restriction was placed on the property located at 3300 Sylvester Road in Albany, Georgia. Amendment #1 to the Lease Agreement was filed on September 13, 1994 in Book 1421 Page 255 in the office of the Clerk, Superior Court, Dougherty County, Georgia. The enclosed amendment restricts groundwater use and well installation as required by the Record of Decision.

If you have questions or need additional information please contact Jane Johnson (formerly Jane Moore) of BFS at (615) 937-1856 or me at (770) 973-2100.

Sincerely,

Mary Ann Brookshire

Senior Scientist

Principal

 ∞ :

Jane Johnson - BFS

Steve Jones - Greenberg Traurig

enclosure

GEORGIA ENVIRONMENTAL PROTECTION DIVISION HAZARDOUS SITE INVENTORY July 1, 2003

Site Number: 10059 SITE SUMMARY

SITE NAME: Firestone Tire & Rubber Co. (Albany Plant)-NPL Site

LOCATION: 3300 Sylvester Road

Albany, Dougherty County, GA 31705

Latitude: 31° 34' 6" N Longitude: 84° 3' 22" W

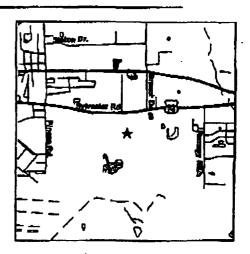
Parcel ID No.: Map 140, Block 1, Parcel 6

LAST KNOWN PROPERTY OWNER AND MAILING ADDRESS:

Dougherty Co Payroll Auth; c/o James Reynolds

Perry, Walters & Lippit; P.O. Box 469

Albany, GA 31702-0469



REGULATED SUBSTANCES RELEASED, AND THREATS TO HUMAN HEALTH AND ENVIRONMENT POSED BY THE RELEASE: This site has a known release of Benzene in groundwater at levels exceeding the reportable quantity. No human exposure via drinking water is suspected from this release. The nearest drinking water well is less than 0.5 miles from the area affected by the release. Other substances in groundwater: 1,1-Dichloroethene; 1,1,1-Trichloroethane.

STATUS OF CLEANUP ACTIVITIES: Cleanup activities are being conducted for source materials, soil, and groundwater.

CLEANUP PRIORITY: The Director has designated this site as Class IV.

GA EPD DIRECTOR'S DETERMINATION REGARDING CORRECTIVE ACTION: The Director has determined that this site requires corrective action.

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STATE OF GEORGIA COUNTY OF DOUGHERTY

AGRESMENT TO GRANT BARRESTS

THIS AGREMENT TO GRANT EARNWENTS, doted this 11... day of March, 1970, by and among the ALBANY DOUGHERTY PAYROLL DEVELOPMENT AUTHORITY, a body corporate and politic and an instrumentality of the State of Georgia (the "Authority"), cooper TIRE & RUBBLY 37 COMPANY, a Delaware corporation ("Cooper"), and BRIQUESTONE/FIRESTONE, INC., an Ohio corporation ("Bridgestone"), under the following circumstances:

- A. The Authority is the owner of certain real property located in Bougherty County, Georgia, which is more particularly described in Embibit A attached hereto and made a part bereof by reference (the "Property"); and
- B. The Authority, as lessor, lessed the Property to Bridgestone, as lesses, pursuant to that certain Lesse Agreement, dated as of Rovember 1, 1967, as amonded by that certain Amenument Mr. 1 to Lesse Agreement, dated April 8, 1986 (collectively, the "Bridgestone Lesse Agreement"); and
- C. In accordance with the terms of that certain Real betate sale and Purchase Agreement, dated as of October 25, 1989, as amended (such agreement as amended, hereinafter them "Agreement"), between Bridgestone and Cooper, Bridgestone and The Authority have terminated the Bridgestone Lease Agreement and the Authority, as lessor, has lessed the Property to Cooper, as lessee, pursuant to a Lease Agreement, dated the date hereof; and
- D. Cooper and Dridgestone scknowledge that the soil, ground water and aquifers of the Property have been contaminated and that the Property has been placed on the Maticual Priorities List (the "MPL") and that Bridgestons, pursuant to Soction 4 of the Purchase Agrament, has agreed at its sole cost, to take certain actions to effectuate the removal of the Property from the MPL as more fully set forth in the Purchase Agrament (such actions, as more fully set forth in the Purchase Agrament, shall hereinefter be referred to as the "Program"); and
- E. The Authority and Cooper, on the terms and conditions set forth bersin, desire to grant to Bridgestone certain easements over, across, beneath and upon the Property in order to permit Bridgestone to implement and complete the Program-

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NOW, THEREFORE, for good and valuable consideration, the receipt and Sufficiency of which is hereby acknowledged, the parties herete agree as follows:

- 1. Subject to the provisions of Paragraph 2 below, the Authority and Cooper shall provide Bridgestone and its contractors with reasonable access to the Property to accomplish such environmental clean-up, testing and monitoring as may be necessary to remedy the contamination and Bridgestone or its contractors may enter upon the Property to install, inspect, maintain and operate such equipment and conduct such sampling, drilling and other activities as Bridgestone deems reasonably appropriate to accomplish such clean-up, testing or monitoring. Neither the Authority nor Chopper shall receive any compensation from Bridgestone for such access. Bridgestone for such access.
- 2. Promptly after receipt of a written request from Bridgestone for an element pursuant to this Agreement, the Authority and Cooper shall grant to Bridgestone such elements and licenses as may be reasonably needed from time to time to (a) efficiently and economically construct, install, operate, maintain, repair, inspect any buildings, machinery and well sampling equipment, pipe lines or other structures of any kind over, across, beneath or upon the Property in order to implement and complete the Program, (b) enter upon the Property to accomplish environmental, cleanup, testing or monitoring as may be necessary to remody contamination, and (c) conduct such sampling, drilling or other activities as Bridgestone deems reasonably appropriate to accomplish annh cleanup, tosting and monitoring. The Authority and Gooper hereby covenant and agree that they will execute such documents as may be reasonably meeded to evidence such ensaments to be granted to Bridgestone without charge to Bridgestone; to be granted to Bridgestone without charge to Bridgestone; provided that they are in substance consistent with this Agreement and in form satisfactory to Cooper and the Authority. The cost of executing and any necessary filing of such easements shall be paid by Cooper. Bridgestone hereby covenants and agrees that it shall not unreasonably interfers with the Authority's or Cooper's utilization of the Property when conducting the Program and exercising its rights under any such easements and Bridgestone and Cooper agree that the location, extent and duration of any such easement is subject to approval by Cooper.
- J. Upon completion of Bridgestone's compliance and remediation programs to the satisfaction of local, county, state and federal environmental authorities in accordance with Section and returns with the section of the Purchase Agreement, and without additional consideration, Bridgestone's rights hereunder shall automatically terminate and Bridgestone's right, title end interest in and to the exceents granted pursuant to this Agreement and execute any requested instruments to cancel such exceents.

- 4. The covenants and agreements herein contained and the rights herein created shall be described for run with the land and shall be binding on, impre to the benefit of and be enforceable in actions at law or in equity against the Authority and Cooper and their respective successors in title to or in any interest in the Property; provided, bowever, the obligations of the Authority and Cooper to grant the easements herounder shall be binding upon the Authority and Cooper only so long as the Authority or Cooper, respectively, own an interest in the Property, so that only the successors in title to the Authority and Cooper, respectively (but not the Authority or Cooper individually), shall be bound hereby. The Authority and Cooper hereby agree to insert during the term of the Program in any deed, lease or other instrument conveying all or a part of the Property, provisions acknowledging and agreeing to Bridgestone's right to obtain easements as provided herein.
- 5. Notwithstanding the provisions hereof, Gooper warrants and covenants that until such time as the Property is removed from the NPL:
 - (i) Cooper will install only above-ground storage tanks for all manufacturing operations upon the Property and that all such tanks will be installed in accordance with the applicable environmental regulations pertaining theretay.
 - (ii) Cooper shall install such above-ground tanks upon the Property at location(s) where Bridgestone can monitor and distinguish potential future releases of Contaminants (as defined in the Agraement) of Cooper from past releases of Contaminents of Bridgestone. Both parties commit to the other to act reasonably and in good faith in belecting such location(s);
 - (iii) Cooper shall not use trichloroethane, trichloroethane (trichloroethylene), dichloroethame, dichloroethylene, methylene chloride and parchloroethylene upon the Property without the express written parmission of Bridgestons and such permission shall not be unreasonably withheld; and
 - (iv) In the event of any release, Cooper shall notify Bridgestone's designated representative in writing simultaneously with the notice given to the applicable environmental agency baving jurisdiction of the property.

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IN WITHESS WHERBOF, the Authority, Cooper and Bridgestone have caused this Agreement to be executed in their respective names and their respective seals to be hereunto affixed, all no of the date first above written.

(CORPORATE SEAL)

......

TOWN L

As to Albany Dougharty Payroll bavelogent Authority, migned, sealed and delivered this day of Match, 1990, in the presence of:

Jan Byrold

May And Tune

ty comission expires: आर्थकार्या हिन्द्र की कि राष्ट्र (date)

(NOTARIAL SEAL)

DEVELOPMENT VILHOUTEN

Title:

Chairman

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COOPER TIRE & RUBBER COMPANY

Title: Prosident

or: william & kee

Title: Yice President

[CORPORATE SEAL]

ATTEST:

6467---

As to cooper Tire a Rubber Company, signed, sealed and delivered this day of March, 1990, in the presence

WY DO BE

Hotary Public

My domnisaion expires: 409/

1041 rue 202

BRIDGESTONE/PIRESTONE, INC.

COMPORATE SEAL)

, ATTRICT:

_

Anderson, Vice Challens

744

As to Bridgestone/Firestone, Inc., signed, sealed and delivered this July day of Harch, 1990, in the presence of:

Weil of San

Wotary Pablic

MARY BETH PACE, Rating Public

Star at Ohio manufaien expert fah. 39, 1991

My combination expires: My combine

(data)

(NOTARIAL SEAL)

SXIIIRIT A

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All that certain tract or parcol of land situate lying and being a part of Land Lot numbers 133, 114 and 115 of the First Land District of Dougherty County, Georgia, and being more particularly described as follows: Begin at the intersection of the south right-of-way (R/W) of Georgia Route 50 and 720, U.S. Route 82 (245° R/W) and the west line of Land Lot 115 and go in an easterly direction along the south R/W of said U.S. Route 82 along the arc of a curve concave northerly having an are length of 321.96's todius of 5898.58', a chord bearing of 5.89 degrees 25' 40" & for a chord distance of 121.92'; go thence N 89 degrees 00' 32" & along the routh R/W of U.S. Route 82 a distance of 1319.09'; continue A chord distance of 121.92'; go thonce N 89 degrees of 32" E along the routh R/W of U.S. Route 82 a distance of 1319.09'; continue thence in a northeasterly direction along the acuth R/W of U.S. Route 82 along the arc of a curve to the left having an arc length of 999.94', a radius of 7809.44', a chord bearing of N 85 degrees 20' 32" E for a chord distance of 998.85'; go thonce N 81 degrees 40" 32" E along the south R/W of U.S. Route 82 a distance of foe.17' to the west R/W of Dranch Road (89' R/W); go thonce S 9 degrees 36' 58" E along the west R/W of Branch Road a distance of 150.00'; go thonce N 81 degrees 40' 32" E a distance of 16.83' to the cost line of Land Lot 115; go thence S 0 degrees 36' 58" E along the cost line of Land Lots 115 and 114 a distance of 476.24' to the north R/W the Seaboard Coastline Railroad; go thence S 89 degrees 23' 02" W along the north line of the Seaboard Coastline Railroad a distance of 100.00', go thence S 0 degrees 36' 58" E along the west R/W of the Seaboard Coastline Railroad (100" R/W) a distance of 3007.57' to a point on the north line of Land Lot 113; continue thence S 0 degrees 36' 58" E along the west R/W of the Seaboard Coastline Railroad (200" R/W) of the Seaboard Coastline Railroad a distance of 61.57', go thonce in a southeasterly direction along the arc of a curve to the left having an arc length of 420.28', a radius of 1003.37', a chould bearing of \$14 degrees 13' 190" E 1000 direct distance of 112' the form of 1500 direct direct distance of 1100 direct d direction along the ard of a curve to the left having an arc length of 420.28°, a radius of 1005.77°, a chord bearing of \$ 14 degrees 23° 11° E for a chord distance of 417.22° to the cast line of Land Lot 113; go thence \$ 0 degrees 36° 58° 8 along the east line of Land Lot 113 a distance of 360.65° to the north R/W of the Seaboard Coastline Railroad Mainline; go thence N 83 degrees 15° 30° W along the north R/W of the Seaboard Coastline Railroad Mainline a distance of 3193.55'; go thonce N 0 degrees 21° 54° W a distance of 689.82° to the south line of Land Lot 114; go thence S 89 degrees 17° 33° W along the south line of Land Lot 114 a distance of 15.00° to the south west corner of Land Lot 114; go thence N 0 degrees 21° 54° W along the west line of Land Lots 114 and 115 a distance of 3693.59° to the south R/W of Georgia Routes 50 and 520, U.S. Route 82 and the point of beginning. Said tract contains 324.665 acres; and

All right, withe and interest of the Albamy Dougherty Payroll Development Authority in and to all land subject to the following easements, rights-of-way and conveyances:

-continued-

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Exhibit A

- 1. Essement to Georgia Power Company, dated August 5, 1969, recorded in Daed Book 409, page 540, bougherty County Land Records.
- Right of way dead in Seaboard Coastline Reliford Company, dated August 5, 1969, recorded in Dead Book 409, page 546, aforesaid records.
- 2. Gas line easement to City of Albany, dated August 5, 1969, recorded in Deed Book 410, page 212, aforeseid records.
- 4. Deed to Commissioners of Roads and Revenues of Dougherty County, duted Maron 15, 1971, recorded in Deed Book 444, page 301, aforesaid records.
- 6. Deed to State Michway Department of Georgia, dated march 13, 1971, recorded in Deed Book 445, page 331, aforesaid records.

Said tract being the same property conveyed by Warranty Deeds from Ann C. Thompson to Albany-bougherty Payroll Development Authority dated September 11, 1967, of record in Deed Book 172, page 117, and First State Bank and Trust Company, Executor under Will of Ray Y. Cross, deceased, dated September 11, 1967, of record in Need Book 173, page 119, and Winifred Chandler Harwell and Paul L. Harwell to Albany Dougherty Payroll Development Authority, dated September 11, 1967, of record in Deed Book 172, page 114, all in the Office of the Clerk of Superior Court of Dougherty County, Georgia.

MICORPED March 32, 1998

Almarce Galler, CLERK

PERAS RETURN TO PERAY, WALTERS & LIPPEY R. C. BOX, 446, ALBANY 21706 (012) 435-7430 CR. C.

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AMENDWENT 41 TO LEASE AGREEMENT

AMENDMENT #1 TO LEASE

This Amendment #1 ("Amendment #1") is made to the LEASE
AGREEMENT ("Agreement") entered into as of March 22, 1990, by
and between the Albany Doughenty Payroll Development
AUTHORITY ("Authority"), and COOPER TIRE & MUBBER COMPANY
("Company").

whereas, the Authority has entered into a consent dedres with the United States of America and Bridgestone/Fireatone, Inc. ("Consent Decree") whereby the Authority is obligated to provide access to the Site and to smend the Agreement Detween the Authority and the Company, the parties agree as follows:

Unless otherwise defined herein, all defined terms have the same meaning as in the Agreement.

- 1. The Company shall not use groundwater from the Residuum, Transition some and Upper Ocala equifers in such a way as to result in human ingestion or dermal contact;
- 2. The Company shall not install any en-site groundwater extracalon well which will diminish the effectiveness of any groundwater extraction well used for purposes of CERCLA (Comprehensive Sovironmental Response, Compensation, and Liability Act of 1980, as amended) response actions at the Site (Site means Project Site as that term is defined in the Agreement); and
- 3. (a) The Company shall notify the Authority of the design and location of any proposed well to be installed at the Site not later than ninety (90) days prior to the proposed installation. The design and location of the wells shall be subject to United States Environmental Protection Agency ("EPA") review and approval.
- (b) Not less than thirty (30) days after receipt of notification from the Company of proposed well installation, the Authority shall notify EFA of the design and location of any proposed wells to be installed by the Company.
- 4. The well use restrictions identified in this Amendment \$1 shall terminate upon notification by RPA of the Contification of Completion of the Work pursuant to Peragraph B1 of the Consent Decree.
- 5. In accordance with Section 9.11 of the Agreement, this Amendment \$1 shall be recorded in the office of the Clerk, Superior Court, Dougherty County, Georgia, or in such other office as may be at the time provided by law as the proper place for such recordation.

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AMENDMENT \$1 TO LEASE AGREEMENT Page 2 of 4

6. All other terms and conditions of the Agresment remain unchanged and in full force and effect.

IN WITHESS WHERBOF, the Authority and the Company have caused this Amendment 51 to be executed in their respective names and their respective seals to be affixed hereto and attested by their authorized officers, all as of August 25, 1994.

ALBANY DOUGHERTY PAYROLL DEVELOPMENT AUTHORITY

l.D

Title: 6

(COMPORATE SEAL)

.....

Ay to Abbany Dougherty Payroll Development Authority, signed, angled an delivered this day of , 1994, in the presence of:

Alten Trans

Morary rable

My Considerion expires: My Constant Expres March 7 (date)

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AMENDMENT \$1 TO LEASE AGREEMENT Page 3 of 4

COOPER TIRE & SUBBER CONPANY

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As to Cooper Tire & Rubber Company, signed, sealed and delivered this 37 day of [[[]]] the presence of:

Know Hon (nee Ase)

SUSAN E. HAMBTON
NOIST PUBLE State of Oblo
My Commission Fraires 03-24-94
(date)

BURK 1421 PURE 258 to lease agreement ALGA INVESTMENTS COMPANY Company, signed, sealed and delivered this 35 day of (127 pc), 1994, in the presence of:

Attachment G Public Notice